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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,640	08/17/2001	Coleman D. Bagwell	72154	6325

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EXAMINER
NGO, NGUYEN HOANG

ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/932,640	BAGWELL, COLEMAN D.
	Examiner	Art Unit
	Nguyen Ngo	2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-13* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-13* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *21 August 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter, which the applicant regards as his invention.
> [07-34-01]

Claim 4 recites the limitation "message from said user management terminal" in line 3.

There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "message from said user management terminal " in line 3.

There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation " forward to said user management terminal responses to

said user commands " in lines 4-6. There is insufficient antecedent basis for this

limitation in the claim.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

3.   Claims 1 – 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu

(U.S Patent No. 6130879), hereinafter referred to as Liu.

Regarding claim 1, the limitation of establishing contemporaneous management

communication sessions with said plural in-band digital communication channels

of respective TDM digital communication links employed by said DSL

communication unit. Liu discloses an access and setup process for accessing

and configuring a variety of optimal end-to-end data path modes, including end-

to-end switching through a PSTN, and through an "always-on" type connection

(figure 2 and col4 lines 50-54), analogous to "contemporaneous sessions". Liu

further discloses the DSLAM architecture comprising of a PCM bank, Access

Router and DS0 interface as well as other units (242, 245, and 246 of figure 3),

that the PCM bank converts voice signals to PCM (analogous to TDM), which

allows either T or E- carrier interface (col7 lines 25-30) and that the Access

Router stage routes the data streams to three main possible routes, one being

DS0 interface. The Examiner interprets the DS0 interface to be robbed in-band

digital communication channels.

With respect to the limitation of transporting user commands over said robbed in-

band digital communication channels, Liu discloses that to start a connection,

DSL transceiver at the user CPE talks to the remote DSLAM (remote device) and

negotiates the transfer rate (user commands), which is then passed over to the

destination end (figure 4D and col10 Lines 5-23).

Regarding claim 2, the limitation of further including transporting responses to

said user commands depending on claim 1, Liu discloses that once the

requested rate (user command) is passed over to the destination end, there will

be a check if the request rate can be supported, if not, the request is either

rejected (response to user command) or the request rate is reduced to a rate that

can be supported (col10 lines 21-27). Liu further states a step of notifying both

the origination and destination sites after said data connection is set up (col12

lines 16-18).

Regarding claim 3, the limitation of DSL communication unit to establish

contemporaneous management communication session by way of a user

management terminal coupled to said DSL unit depending on claim 1, Liu

discloses that each end to end site be comprised of CPE, which is coupled to a

DSLAM (230 of figure 2 and col3 lines 60-64). The Examiner interprets that the

CPE potentially be a user management terminal.

Regarding claim 4, the limitation of response to receipt of a message from said

user management terminal containing the identification of a respective remote

device for whom a management communication session is to be conducted

depending in claim 1. Liu discloses that both sites (management terminal and

remote device) must confirm the request in order to have an end-to-end

connection established for data transmission (col5 lines 36-37). Examiners

believe that this confirmation may be in a form of a message. Liu however is

silent on the message containing the identification of the remote device, but it is

obvious that the confirmation contains the identification of the respective remote

digital communication device in order to set up a connection.

Regarding claim 5, the limitations of claim 1 and further transporting responses

by remote devices to said user command, and further forwarding said responses

to said user management terminal. As mentioned above, Liu discloses that the

request rate can either rejected (response to user command) or the request rate

is reduced to a rate that can be supported (col10 lines 21-27) and that both sites

(management terminal and remote device) must confirm to a request before an

end-to-end connection is established (col5 lines 36-37).

Regarding claim 6, the limitation of interfacing said TDM digital communication

links with an IAD that is configured to provide access to remote devices via a

user management terminal coupled to said IAD, establishing contemporaneous

management session over robbed in-band channels, and transporting user

commands over robbed in-band channels. As already mention, Liu discloses all

the limitations of claim 1 and further discloses a DSLAM architecture which

combined with DSL connections, give access to WAN for high speed, but non-time sensitive services such as Internet access (col8 lines 13-16) and give virtual permanent connections for corporate users (remote devices) (col8 lines 17-20). The Examiner interprets this DSLAM to be an IAD. The DSLAM is coupled to a CPE (management terminal) (230 and 240 of figure 2).

Regarding claim 7, the limitation wherein further includes transporting responses to said user command depending on claim 6. Liu discloses, as mentioned with claim 2, that once the requested rate is passed over WAN to the destination end, there will be a check if the request rate can be supported, in which the request is either rejected (responses to said user commands) or the request rate is reduced to a rate that can be supported (col10 lines 21-27).

Regarding claim 8, the limitation of response to receipt of a message from said user management terminal containing the identification of a respective remote device for whom a management communication session is to be conducted depending on claim 6. Liu discloses, as mentioned with claim 4, that both sites must confirm the request in order to have an end-to-end connection established for data transmission (col5 lines 36-37).

Regarding claim 9, the limitations of claim 6 and further transporting responses by remote devices to said user command, and further forwarding said responses

to said user management terminal. Liu discloses, as mentioned with claim 5, that both sites must confirm to a request before an end-to-end connection is established (col5 lines 36-37) and also will notify both the originating and destination sites after said data connection is set up (col12 lines 16-19).

Regarding claim 10, the limitation of an arrangement for managing operational characteristics of remote devices comprising a DSL unit that is configured to provide access to remote devices, a communication controller for said communication unit that is operative to cause said DSL unit to establish contemporaneous sessions over robbed in-band channels. Liu discloses as mentioned above, all the limitations of claim 1 and further discloses a DSLAM comprising an Access Router and a Signaling for Rate Setup/Control and Access Select, (244 and 245 of figure 3) which determines how the user data stream will be routed (col7 lines 38-41). Liu further discloses that the DSLAM be operative as it provides the servicing of end-to- end connections or virtual permanent connections (col8 lines 3-20). Examiner interprets this to be analogous with an operative communication controller.

Regarding claim 11, the limitation of the communication controller to be operative to cause said DSL unit to transport user commands depending on claim 10. Liu discloses, as mentioned with claim 1, that a DSL transceiver at the user CPE talks to the remote DSLAM and negotiates the transfer rate (user command),

which is then passed over to the destination end (figure 4D and col10 Lines 5-23).

Regarding claim 12, the limitation of response to receipt of a message from said user management terminal containing the identification of a respective remote device for whom a management communication session is to be conducted depending on claim 10. Liu discloses, as mention with claim 4, that both sites must confirm the request in order to have an end-to-end connection established for data transmission (col5 lines 36-37).

Regarding claim 13, the limitation wherein said communication controller is operative, during said contemporaneous management sessions depending on claim 10, Liu discloses, as mentioned with claim 5, that both sites must confirm to a request before an end-to-end connection is established (col5 lines 36-37) and also will notify both the originating and destination sites after said data connection is set up (col12 lines 16-19). The DSLAM (communication controller) is operative as mentioned above in claim 10, as it provides the means of the end-to-end data link.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Whitcher et al. (U.S. 6,754,221), System and method for selecting a compression algorithm according to an available bandwidth.

b) Parham et al. (U.S. 6,839,342), System and method for interfacing signaling information and voice traffic.

c) Pfeffer (U.S. 6,128,293), Multiservice Access Management System.

d) Hagirahim et al. (U.S. 6,771,763), Method and Apparatus for providing efficient VODSL gateway-to-gateway communication.

e) Chea, Jr. et al. (U.S. 6,546,089), Method and system for supporting a lifeline associated with voice over DSL.

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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